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Determinants of Tax Evasion Behavior: Empirical Evidence from Survey Data

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Abstract

Tax revenues are major and important income sources for governments in most countries. Sufficient tax revenues make many government projects possible and help elected officials and politicians to remain in office longer if the government implements programs and projects demanded by the public. In today's globalizing economic environments, there is increasing demand for a variety of public services and programs. However, the rate of increase in the tax revenues to finance these public services and programs falls short of the necessary public spending. The potential tax revenue of a country based on its legal or tax law is much larger than the tax revenues that are actually collected. Due to the lack of full tax compliance, government budgets are rarely balanced in most countries, and the gap between revenue and spending is increasing. The main question is why taxpayers evade taxes. To understand tax evasion, one can examine what factors cause taxpayers to evade taxes. If factors that affect tax evasion are identified, policies can be developed to prevent tax evasion.

The purpose of this study is to investigate factors related to tax evasion behavior using survey data collected in Turkey. Factor analysis and multiple regression techniques are employed. The results show that taxational and fiscal factors, economic factors, demographic factors, administrative factors, and other factors have statistically significant effects on tax evasion behavior.

Key words: Tax evasion; Tax compliance; Individual behavior; Factor analysis

INTRODUCTION

Tax revenues are major and important income sources for governments in most countries. Sufficient tax revenues make many government projects possible and help elected officials and politicians to remain in office longer if the government implements programs and projects demanded by the public. Additionally, the collection of appropriate tax revenues can help to stabilize the economy by ensuring less dependency on government borrowing. In today's globalizing economic environments, there is increasing demand for a variety of public services and programs. However, the rate of increase in the tax revenues to finance these public services and programs falls short of the necessary public spending. The potential tax revenue of a country based on its legal or tax law is much larger than the tax revenues that are actually collected. A number of factors may contribute to the difference between potential and actual tax revenues. Tax collecting agencies may demonstrate institutional inefficiencies, inadequate tax collection capabilities, and personal management issues. Among taxpayers, many factors may lead to incomplete tax compliance. Due to the lack of full tax compliance, government budgets were rarely balanced in most countries from 2002 to 2010, as shown in Table 1. France, Greece, Japan, Portugal, the United Kingdom, and the United States face large budget deficits that were more than 5 percent of their respective GDPs in 2009 and 2010. A large budget deficit may not be attributable only to tax collection, but this may be an important factor.

Table 1
Cash Surplus/Deficit (Percent of GDP)

Country Name	2002	2003	2004	2005	2006	2007	2008	2009	2010
Brazil	-1.17	-4.34	-1.86	-3.59	-2.89	-1.87	-1.21	-3.47	-1.67
Canada	1.55	1.12	1.58	0.82	1.64	1.79	0.60	-1.42	-2.03
France	-3.40	-4.13	-3.47	-2.79	-2.18	-2.34	-2.86	-7.26	-6.98
Germany	-2.05	-2.22	-2.38	-2.33	-1.28	-0.33	-0.32	-2.24	-3.11
Greece	-4.88	-5.80	-7.35	-5.59	-5.93	-6.73	-9.84	-15.80	-10.77
India	-4.59	-3.38	-3.20	-3.18	-2.24	-0,47	-4.87	-5.23	-3.77
Italy	-2.37	-3.21	-2.59	-3.66	-2.43	-1.42	-2.29	-5.00	-4.04
Japan				-4.06	-0.87	-2.44	-2.95	-7.58	-6.73
Korea, Rep.	3.64	1.71	0.10	0.91	1.14	2.32	1.64	0.02	1.65
Portugal	-2.49	-2.66	-3.30	-5.52	-3.93	-2.57	-3.20	-9.41	-8.99
Turkey					1.90	1.41	-1.94	-5.55	-2.25
United Kingdom	-1.98	-3.51	-3.20	-3.04	-2.74	-2.69	-4.71	-10.98	-10.04
United States	-2.60	-3.83	-3.62	-2.76	-1.83	-2.23	-5.29	-10.39	-10.11

Source: World Bank, World Databank, World Development Indicator.

One indicator of insufficient tax collection may be government debt stock. Many countries have government debt stocks that are more than 60 percent of their GDPs. Table 2 reports central government debt stocks as a percentage of GDP for selected countries. Greece, Italy, and Japan have debt stocks greater than 100 percent of their respective GDPs. Furthermore, France, Portugal, the United Kingdom, and the United States have debt stocks greater than 50 percent of their GDPs.

Table 2
Central Government Debt Stock (Percent of GDP)

Country Name	2002	2003	2004	2005	2006	2007	2008	2009	2010
France	66	70	71	73	68	67	73	84	88
Germany	39	41	43	45	43	41	43	48	56
Greece	129	124	128	125	128	126	128	144	135
Italy	115	111	111	113	109	104	107	119	117
Japan				144	145	144	153	167	175
Portugal	63	65	67	70	69	68	79	91	94
Turkey					51	44	44	51	51
United Kingdom	41	42	44	46	46	47	57	73	83
United States	43	46	47	47	47	47	55	68	77

Source: World Bank, World Databank, World Development Indicator.

A higher government debt burden limits the government's ability to provide various public goods. To avoid this limitation, tax administrations attempt to fully collect due taxes. The subject of this study, Turkey's tax share of its general government budget from 1990 to 2011, is shown in Table 3. The average share of tax revenue to general government spending is approximately 82 percent for the most recent 22-year period in Turkey. On average, there is a tax revenue gap of 18 percent from a balanced budget.

Table 3
Share of Tax Revenues in General Government Budget in Turkey (1990 – 2011)*

Years	Share	Years	Share
1990	82	2001	78
1991	82	2002	80
1992	81	2003	86
1993	75	2004	84
1994	79	2005	80
1995	78	2006	83
1996	84	2007	84
1997	83	2008	84
1998	79	2009	84
1999	79	2010	87
2000	80	2011	90

* Composition of general tax revenues are as follows: Between 1990 and 2003 tax revenue, non-tax income, private income and funds, between 2004 and 2006 tax revenues, non-tax income, capital income, grants and aids received, between 2006 and 2010 tax revenues, enterprise and property income, grants and aids received, interest income, shares and income from fine and capital income.
Source: General Directorate of Revenue, Tax Statistics, http://www.gib.gov.tr/, Visited: 08/07/2012.

Although the share of tax revenue to the general state budget is high, it is not sufficient to cover total public expenditure. There is an enormous gap between the amount of taxes legally owed (which can be considered the potential tax amount) and the amount of taxes that the government actually collects. To obtain insight into the tax avoidance behavior of taxpayers, one can consider tax inspection statistics. Table 4 presents brief tax auditing results from Turkey for 2000 to 2009. The rate of tax auditing is approximately 2 percent in Turkey when only income and corporate taxation are considered. The tax base is shown in column 2, and the difference identified in the tax base through the auditing process is shown in the third column. This difference was approximately 267 percent in 2008, which is the highest number in a recent ten-year period. In 2008, taxpayers reported a tax base of nearly 79 billion TL; however, inspectors found a 211 billion TL difference in the tax base in the same year. This means that the true or potential tax base was 290 billion TL.

Table 4
Results of Tax Audits (2000 – 2009)

Years	Inspected Tax Base* (000 TL) (1)	Differences Found in Tax Base* (000 TL) (2)	(2/1) Percent	GDP (Current Prices) (000 TL) (3)	Total Tax Revenues (000 TL)(4)	(4/3) Percent
2000	3,621,021	1,987,099	54.8	166,658,021	26,503,698	15.9
2001	7,289,622	13,478,317	184.8	240,224,083	39,735,928	16.5
2002	13,863,392	7,971,330	57.4	350,476,089	59,631,868	17.0
2003	25,563,195	18,834,977	73.6	454,780,659	84,316,169	18.5
2004	22,124,052	18,712,916	84.5	559,033,026	101,038,904	18.0
2005	32,548,467	38,715,354	118.9	648,931,712	131,948,778	20.3
2006	46,796,638	47,419,483	101.3	758,390,785	151,271,701	19.4
2007	63,409,073	30,450,980	48.0	843,178,421	171,098,466	20.2
2008	78,838,889	211,092,889	267.7	950,534,251	189,980,827	19.9
2009	125,603,952	97,972,236	78.0	952,558,579	196,313,308	20.6

* Inspection results include audits that have done by tax administration after 2001.
Source: Data have been collected and reconciled by the following web sites (2001 – 2009), http://www.gkd.org.tr/, http://www.gib.gov.tr/, visited: 02/22/2011. GDP (2000-2009), http://www.tuik.gov.tr/, Visited: 04/27/2011. Total Tax Revenue, http://www.gib.gov.tr/fileadmin/user_upload/VI/GBG/Tablo_1.xls.htm, Visited: 04/27/2011.

Thus, it is clear that one of the most important reasons for this gap is tax evasion. Tax evasion is a gamble that pays off in lower taxes or, due to the probability of detection, ends in sanctions (Torgler, 2003). In other words, tax evasion is a process that reduces taxpayers' tax liability to zero (if possible) by acting against the related tax law. From the standpoint of the tax authority, it is important to identify tax evasion behavior by taxpayers. Knowledge of this information can help the tax authority to develop policies to prevent tax evasion and collect sufficient tax revenues.

To understand tax evasion, one can examine the factors that cause taxpayers to evade taxes; based on this information, policies can be developed to prevent tax evasion. This study uses data from a survey conducted in Turkey to answer the question of which factors contribute to tax evasion. The rest of this paper is organized as follows: section 2 reviews the relevant literature, section 3 describes the method and data, section 4 describes the research results, and section 5 provides conclusions.

1. BRIEF LITERATURE REVIEW

Many factors have been studied in the literature to explain the tax evasion behavior of taxpayers. Previous studies include those by Allingham and Sandmo (1972), Spicer and Becker (1980), Clotfelter (1983), Feinstein (1991), Kirchler (1997), Frey and Feld (2002), Torgler (2003), and Feld, Torgler, and Dong (2008). Some common factors examined in these studies include tax rates, the tax burden, income level, source of income, tax audits, tax penalties, public expenditures, public services, tax mentality, tax morale, age, gender, marital status, education, the tax system, the tax administration, bureaucracy, and democracy.

Since the pioneering work of Allingham and Sandmo (1972), the literature on tax evasion has been significantly expanded. Allingham and Sandmo (1972) identified both static and dynamic aspects of tax evasion. They emphasized the relationship between incentives to avoid taxes and incentives to supply work effort. Additionally, they showed that the declared income level depends on actual income, the tax rate, the penalty rate, and the audit rate. They explained their finding as follows: "When actual income varies, the fraction declared increases, stays constant or decreases according as relative risk aversion is an increasing, constant or decreasing function of income" (Allingham & Sandmo, 1972). They concluded that the substitution effect was negative because an increase in the tax rate makes it more profitable to evade taxes on the margin, whereas the income effect is positive because an increased tax rate makes the taxpayer less wealthy. Their study showed that an increase in the penalty rate will always increase the fraction of actual income to be declared, and an increase in the probability of detection will always lead to a larger income being declared.

Some papers have stressed that an increase in the tax rate will result in an increase in the propensity for tax evasion (Clotfelter, 1983; Crane & Nourzad, 1990; Alm, Jackson & Mc Kee, 1992; Pommerehne & Weck-Hannemann, 1996; Saracoglu, 2008). A positive relationship has been identified in the literature between income level and tax evasion: as individuals' income levels increase, their tax evasion behavior also increases (Crane & Nourzad, 1990; Becker, Büchner & Sleeking, 1987). However, Dubin, Graetz, and Wilde (1990) conclude that "there is strong direct relationship between real income per capita and reported taxes per return", and the empirical results of Alm, Jackson, and McKee (1992) indicate that "higher income leads to higher compliance". Johns and Slemrod (2008) find that "the ratio of underreported tax to true tax highest for lower-income taxpayers". In other words, lower-income taxpayers have lower compliance. This finding implies that low-income earners are likely to hide their income. However, Feinsten (1991) finds no significant relationship between income and tax evasion. Richardson (2006) finds that tax evasion is much lower when the source of income is from wages and salaries. Spicer and Lundstedt (1976) do not find a significant relationship among tax evasion, tax penalties, and the probability of detection. Similarly, Alm, Jackson, and McKee (1992) do not capture a significant relationship between the penalty rate and tax evasion. Bagdigen and Erdogan (2010) emphasize that an increase in tax penalties leads to a decrease in tax-evading behavior by taxpayers.

From the perspective of tax auditing, it is clear that an increase in tax audits leads to a decrease in tax evasion (Alm, Jackson and McKee, 1992; Alm, McClelland and Schulze, 1992). Gemmell and Ratto (2012) investigate the relationship between random audits and taxpayers' responses by comparing randomly selected audited and non-audited taxpayers. These authors conclude that audited taxpayers have reduced subsequent compliance. In their study, Snow and Warren Jr. (2005) conclude that an increase in tax audits and tax penalties leads to an increase in tax evasion. Becker, Büchner, and Sleeking (1987) show that an increase in the percentage of public transfer expenditures leads to a decrease in tax evasion.

Buehn and Schneider (2012) developed a time series of the tax evasion for 38 OECD countries between 1999 and 2010. In their study, these authors consider indirect taxation and self-employment as the driving forces of tax evasion. They find that the average level of tax evasion for 38 OECD countries in 2010 was 2.8 percent. The highest tax evasion level was found in Mexico (6.8 percent) over the 1999-2010 period, followed by Turkey (6.7 percent), Romania (6.0 percent), and Bulgaria (5.7 percent). The United States had the lowest tax evasion level (0.5 percent).

Tax mentality, tax morale, civic duty, and law-abiding citizens affect levels of tax evasion. For example, Kirchler (1997) and Feld, Torgler, and Dong (2008) stressed that a positive tax mentality and tax morale have a negative effect on tax evasion.

Dell'Anno (2009) reports that tax morale is dependent on taxpayers' intrinsic attitudes toward honesty and social stigma. Social stigma represents the reputational cost. A decrease in reputational cost tends to increase tax evasion. Dulleck *et al.* (2012) conduct an experiment using heart rate signals to analyze the relationship between psychic cost (for instance, feelings of guilt) and tax compliance. They find a positive relationship between psychic cost and tax compliance. Bayrakli, Saruc, and Sagbas (2004) show that when tax-evading behavior is known by other people, the resulting embarrassment cost tends to decrease tax evasion.

The effect of demographic factors on tax evasion is controversial in the literature. Some studies provide empirical evidence of a significant relationship between demographic factors and tax evasion, whereas other studies do not find a significant relationship. For example, Spicer and Becker (1980) show that

male taxpayers tend to evade taxes more than female taxpayers. McGee and Tyler (2006) stress that tax evasion is more unacceptable behavior for female taxpayers than for male taxpayers. Feinstein (1991) emphasizes that individuals who have their own business are much more likely to evade taxes than the average taxpayer. He also finds that individuals who are 65 years or older are less likely to evade taxes and that married individuals are more likely to evade taxes.

Frey and Feld (2002) study the relationship between tax morale and tax officials' behavior in the context of tax evasion. They find that when tax officials are respectful in their duties toward taxpayers, tax morale increases. Richardson (2006) studies the relationship between tax evasion and the complexity of the tax structure. He finds that the lower the level of complexity, the lower the level of tax evasion is across countries. Riahi-Belkaoui (2008) studies bureaucracy and tax behavior and concludes that an increase in bureaucracy leads to an increase in tax evasion. In sum, many factors contribute to or affect the tax-evading behavior of taxpayers. However, the degree of each factor's effect on the tax-evading behavior of taxpayers may differ due to differences in cultural and institutional settings.

2. METHOD AND DATA

In this section, we introduce our data and perform the necessary tests. Then, we use factor analysis and run multiple regressions.

To study the tax evasion behavior of taxpayers in Turkey, we conducted a survey in the province of Eskisehir. The survey sample consisted of 500 randomly selected taxpayers. Surveys were distributed in the summer of 2010. Of the 500 surveys distributed, 420 were returned, for a response rate of 84 percent. The sample comprised small, medium and large corporations, workers who received wages from these companies, public institutions, offices owned by self-employed persons, and small traders. The survey included two sections and 37 questions. The first section consisted of questions about the demographic characteristics of the taxpayers, and the second section included statements related to the tax evasion behavior of taxpayers. Thirty statements were presented in the second section, and respondents were asked to rate the importance of each statement using a five-point Likert scale (1 = least important; 5 = most important).

The demographic characteristics are reported in Table 5. Of the total sample in the study, most of the respondents were male (70.53 percent). Approximately half of the subjects were in the 40- to 50-year-old age range (56.6 percent), 21 percent were younger than 30 years old, and 22.5 percent were between 51 and 71+ years old.

Table 5
Participants' Demographic Characteristics

Demographic Variables	Definition	Frequency	Percentage
Age	10-20	8	2.0
	21-30	76	19.0
	31-40	89	22.3
	41-50	137	34.3
	51-60	74	18.5
	61-70	14	3.5
	71+	2	0.5
Gender	Male	282	70.5
	Female	118	29.5
Marital Status	Married	292	73.0
	Single	89	22.3
	Divorced	9	2.3
	Widowed	9	2.3
	Separated	1	0.3
Number of Child	None	110	27.5
	1	87	21.8
	2	142	35.5
	3	54	13.5
	4+	7	1.8

Social characteristics are reported in Table 6. The incomes of the respondents ranged from 601 TL to 2500 TL per month (64.8 percent). Regarding education level, 33 percent of the respondents had a university degree, 3.1 percent were post-graduates, 21.3 percent had an upper-school degree, 41.3 percent had secondary school education, and 1.5 percent had obtained a primary school diploma.

Table 6
Participants' Social Characteristics

Demographic Variables	Definition	Frequency	Percentage
Diploma Earned	Primary Sch.	6	1.5
	Secondary Sch.	32	8.0
	High School	133	33.3
	Upper Sch.	85	21.3
	University	132	33.0
	Master	11	2.8
	PhD.	1	0.3
Occupation	Businessman	20	5.0
	Industrialist	22	5.5
	Small Traders	86	21.5
	Public Officials	106	26.5
	Farmers	8	2.0
	Self Employed	69	17.3
	Renter	7	1.8
	Worker	41	10.3
	Others	41	10.3
Income Level (TL)	Less than 600	27	6.8
	601-1500	153	38.3
	1501-2500	106	26.5
	2501-5000	37	9.3
	5001-10000	22	5.5
	10001-20000	21	5.3
	20001-50000	18	4.5
	50001-100000	11	2.8
	100001-200000	4	1.0
	200001 +	1	0.3

The taxpayers consisted of two types of individuals: 49 percent were wage and salary earners, and the remaining 51 percent owned their own businesses.

We performed a Cronbach's alpha test on our data and obtained a coefficient of 0.775 for all 30 items. All of the scale's reliability values were well above 0.70, indicating a satisfactory level of internal consistency among the items in the study. Consequently, the reliability and validity of the measurement model were satisfactory.

2.1 Factor Analysis

To apply factor analysis, it was necessary to test the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy (Zhang *et al*., 2003). This test result is shown in Table 7. For the attitude variables, the KMO value was 0.798, which indicates that the sample was adequate for factor analysis (Kaiser, 1974). The Bartlett Test for Sphericity (BTS) is also reported in Table 7. This test result was 3183.308 ($p < .001$), which confirms the adequacy of using factor analysis.

Table 7
KMO and Bartlett's Test of Sphericity

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		0.798
Bartlett's Test of Sphericity	Approx. Chi-Square	3183.308
	df	435
	Sig.	0.000

Orthogonal rotation (varimax) was chosen for the exploratory factor analysis. As Hair, Anderson, Tatham, and Black (1995) note, orthogonal extraction with varimax rotation is appropriate for the research purposes and the need to reduce a large number of variables to a small set of uncorrelated variables. The purpose of varimax rotation is to minimize the number of variables that have high loadings on a factor, which enhances the interpretability of the factors (Kim & Mueller, 1978).

According to the principal component analysis, eight factors had an eigenvalue equal to or greater than 1.0, explaining a total of 56.761 percent of the variance, as shown in Table 8.

Table 8
Total Variance Explained*

	Initial Eigen Values	Extraction Sums of Squares Loadings		Rotation Sums of Squared Loadings		
Total	Total	Percent of Variance	Cumulative Percent	Total	Percent of Variance	Cumulative Percent
1	4.285	4.285	14.282	14.282	3.328	11.093	11.093
2	4.186	4.186	13.952	28.234	2.676	8.919	20.013
3	2.293	2.293	7.644	35.878	2.527	8.423	28.436
4	1.540	1.540	5.134	41.012	2.344	7.812	36.248
5	1.358	1.358	4.528	45.540	1.775	5.915	42.163
6	1.197	1.197	3.991	49.530	1.568	5.226	47.388
7	1.116	1.116	3.721	53.252	1.541	5.136	52.525
8	1.053	1.053	3.510	56.761	1.271	4.237	56.761

*Other variables' (from 9 to 30) initial eigen values (total) change between 0.919 and 0.280.

Based on the factor loadings, we classified and named the factors shown below.

Tax Evasion Factor (contained three items, such as tax morality, tax mentality).

Taxational and Fiscal Factors (contained eight items, such as tax rate, tax burden).

Economic Factors (contained six items, such as rational behavior, cost and benefit, utility maximization)

Demographic Factors (contained four items, such as gender, age).

Politic Factors (contained three items, such as democracy, fair income distribution).

Administrative Factors (contained two items, such as tax penalties, tax audits).

Mixed Factors (contained five items, such as income level, income components).

Additional Factors (contained two items, such as informal economy).

All loading estimates were significant ($p<0.01$), ranging from a low of 0.40 to a high of 0.84.

Table 9
Factor Loadings

	Factors							
	1	2	3	4	5	6	7	8
t1		0.784						
t2		0.842						
t3		0.800						
t4	0.463							
t5	0.753							
t6	0.755							
t7			0.693					
t8			0.711					
t9			0.694					
t10			0.537				0.428	
t11					0.781			
t12					0.602			
t13			0.458					
t14	0.462						0.411	
t15							0.642	
t16								
t17	0.419							-0.406
t18				0.794				
t19				0.793				
t20				0.616				
t21				0.443				0.646
t22					0.428		0.483	
t23							0.518	
t24			0.485					
t25	0.467							
t26	0.650							
t27						0.629		
t28								
t29						0.748		
t30	0.618							

2.2 Regression Analysis

After the factor analysis, we ran a regression using the factors as variables to identify their effect on tax evasion. In addition to these factors, we also used gender, income, education, marital status, and age as independent variables. We used an equation in the following form:

$TE = \beta_0 + \beta_j X_j + \varepsilon$.

In this equation, *TE* is the *dependent variable,* called tax evasion, and X_j represents the independent variables. There are 12 independent variables: taxational and fiscal factors (X_1), economic factors (X_2), demographic factors (X_3), political factors (X_4), administrative factors (X_5), mixed factors (X_6), additional factors (X_7), gender (X_8), income (X_9), education (X_{10}), marital status (X_{11}), and age (X_{12}).

We tested our data for heteroscedasticity using the Ljung-Box Q_((n))^2 test statistic for the nth lag. The test statistics were lower than the critical values (0.0000<0.01). Consequently, the null hypothesis was rejected. We follow White's (1980, 1986) correction procedure to increase the efficiency of our estimation and used the Ramsey-RESET Stability Test. The results showed that there was no misspecification in the model.

3. RESULTS

Our regression results are presented in Table 10. Our results show that economic, demographic, administrative, and additional factors are statistically significant. There is a positive relationship between tax evasion and taxational and fiscal factors. This result indicates that increases in the tax rate and in the tax burden increase tax evasion. This result supports the studies by Clotfelter (1983), Crane and Nourzad (1990), Alm, Jackson, and McKee (1992), Pommereehne and Weck-Hannemann (1996), and Saracoglu (2008). We find a positive relationship between administrative factors and tax evasion, which is in accordance with the findings by Snow and Warren Jr. (2005). Economic factors have negative and statistically significant effects on tax evasion.

Table 10
Coefficients

Model	Understandardized Coefficients		Standardized	t	Sig.
	B	Std. Error	Coefficients Beta		
(Constant)	1.499	0.323		4.640	0.000
Taxational and Fiscal Factors (X1)	0.087	0.048	0.087	1.820	0.070*
Economic Factors (X2)	-0.135	0.049	-0.135	-2.749	0.006***
Demographic Factors (X3)	-0.113	0.050	-0.113	-2.272	0.024**
Politic Factors (X4)	0.057	0.047	0.057	1.218	0.224
Administrative Factors (X5)	0.121	0.049	0.121	2.461	0.014**
Mixed Factors (X6)	0.032	0.047	0.032	0.686	0.493

To be continued

Continued

Model	Understandardized Coefficients		Standardized	t	Sig.
	B	Std. Error	Coefficients Beta		
Additional Factors (X7)	-0.140	0.049	-0.140	-2.834	0.005***
Gender (X8)	-0.149	0.108	-0.068	-1.379	0.169
Income (X9)	-0.219	0.036	-0.396	-6.074	0.000***
Education (X10)	-0.133	0.047	-0.147	-2.842	0.005***
Marital Status (X11)	0.088	0.076	0.058	1.158	0.248
Age (X12)	-0.057	0.049	-0.067	-1.155	0.249

$R^2 = 0.168$ F = 6.506 (prob. 0.000), ***Statistically significant at p = 0.01,
** Statistically significant at p = 0.05, * Statistically significant at p = 0.10

Education also has a negative effect on tax evasion. This finding can be interpreted as indicating that those taxpayers who have less education tend to evade taxes more often than higher-educated taxpayers. With regard to income level, there is a negative effect on tax evasion. As income increases, taxpayers show tax compliance behavior rather than showing tax-evading behavior. As Alm, Jackson, and McKee (1992) note, "Higher income leads to higher compliance".

CONCLUSIONS

In many countries, there is an enormous gap between the amount of taxes legally owed and the amount of taxes that taxpayers report and pay. One of the reasons for this gap may be different tendencies in the tax evasion behavior of taxpayers. The results of this study show that taxational and fiscal factors, economic factors, demographic factors, administrative factors, and additional factors are statistically significant for individuals' tax-evasion behavior. These findings may be useful to policy makers and researchers. Specifically, tax authorities should design policies to help increase the income level of taxpayers rather than increasing administrative measures toward taxpayers. This may lead to higher tax compliance in the long run. Our findings contribute to the literature by providing additional evidence on the factors related to tax evasion. However, the data used in this study were collected in only one city. Further studies may be conducted to obtain more supportive evidence by using a multi-city analysis.

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